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AN INVESTIGATION OF INSTRUCTORS' AND STUDENTS' PHILOSOPHY
OF EDUCATION WITH STUDENT EVALUATIONS OF
INSTRUCTORS AT BLUE RIDGE TECHNICAL INSTITUTE
DURING THE FIRST YEAR OF OPERATION

A Thesis
Presented to
the Graduate Council of
Appalachian State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

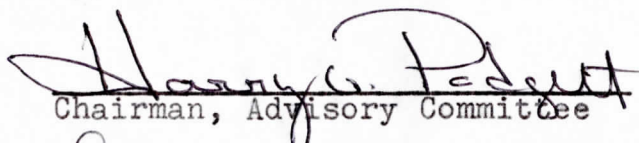
by
Danny Hart Bost
June 1971


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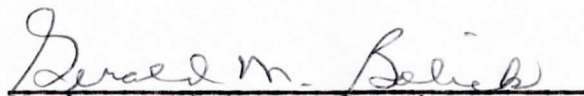
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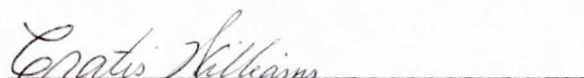
Danny Hart Bost

Approved by


Chairman, Advisory Committee


Member, Advisory Committee


Member, Advisory Committee


Dean of the Graduate School

Thesis Abstract

The purpose of the study was to investigate students' perceptions of instructors' professional attitudes and students' and instructors' educational philosophy during the initial quarter in a newly established technical institute.

The 75 subjects of the study were selected from the initial 100 Fall quarter enrollees at Blue Ridge Technical Institute at Hendersonville, North Carolina. Twenty-five students from the initial 100 enrollees were excluded from the study due to withdrawals or absences during the quarter. The instructors of the study were the initial full-time curriculum instructors employed at the Institute.

The students in the study were pre- and posttested on two instruments: (a) Kerlinger's ES-VII, and (b) the Professional Education Attitude Test (PEAT). The instructors of the study were pre- and posttested on Kerlinger's ES-VII.

The data collected on the two instruments were subjected to statistical treatment (t tests) to test the Major Null Hypothesis at the .05 and .01 level of confidence.

On Kerlinger's ES-VII Drafting students showed a significant increase in the direction of a progressive philosophy of education while Business students indicated movement toward a traditional educational philosophy.

Significant differences toward a progressive philosophy of Business Administration students when compared with instructors were found on the posttest measure of Kerlinger's ES-VII as they existed on the pretest measure. Electrical students, when compared with instructors, retained a significant traditional philosophy on the posttest as on the pretest. Welding and Drafting students failed to show significant differences in their philosophy on the posttest as they did on the pretest. Male students retained their significant position of holding a progressive educational philosophy on the posttest measure which they held earlier. On the Professional Education Attitude Test, significant change was noted in Welding students' perceptions of their instructor's teaching techniques.

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Chapter 1

Introduction

In the area of educational evaluation there have been several methods of assessing instructor effectiveness and educational philosophy. According to Voeks (1962), there are three methods of evaluating an instructor's effectiveness. One of the most basic and logical methods can be accomplished by testing student achievement. Another method is based upon the evaluations of colleagues and administrative heads. A third method of teacher evaluation can be accomplished by the students themselves. Voeks (1962) stated: "Student ratings are made by those who are actually experiencing the teaching process and very often know when their interest has been increased or their enthusiasm for learning has been heightened (p. 213)."

One way in which students can evaluate teaching is through formal ratings of each instructor by his own students. The comments of Centra (1966) contend:

There is every indication that, on the whole, formal student evaluations, if handled properly, can be quite useful and valid. However, student ratings tend to be less valid when describing the qualifications and characteristics of the instructor, for students very often equate good teaching with exuberant personality and an entertaining lecturer.

It seems unlikely that students are qualified to evaluate such areas as teacher's qualifications in a subject, the course objectives, and the soundness of teaching the course itself. Therefore, to insure maximum validity, the rating form should

be carefully designed so that only areas pertaining specifically to organization, techniques, and atmosphere which directly affect the student's learning should be evaluated (p. 263).

Statement of the Problem

The purpose of this study was to determine if any significant changes occur in students' perceptions of instructors professional attitudes and instructors' and students' educational philosophy during the initial quarter in a newly-established technical institute.

More specifically, the study investigated the perceptions and philosophy of the initial one hundred curriculum students who matriculated during Fall quarter of 1970 at Blue Ridge Technical Institute of Hendersonville, North Carolina, and the educational philosophy of the initial full-time instructors. The students were enrolled in the curriculum programs of Automotive Mechanics, Electrical Installation and Maintenance, Business Administration, Executive Secretarial, Drafting and Welding.

The objectives were as follows: (a) to determine whether students' perceptions of their instructor at the end of a quarter differed significantly from their initial perceptions; (b) to determine if students' philosophy of education yielded any significant changes over a quarter; and (c) to determine if instructors' philosophy of education changed significantly over a quarter.

Significance of the Problem

Because much of the nation still holds the university concept that the only good education is an education capped by four years of college, it is important that technical institute training for students be improved. Constant evaluation of technical institutions' programs, instructors, and students is mandatory. Students and instructors in technical training centers possess diversified educational backgrounds and philosophies; therefore, an effort to insure the effective performance of the instructional personnel is needed.

Kerlinger (1963) noted that much research energy has been expended and many words written on the characteristics, philosophies, and effectiveness of teachers. However, there is little known as to what constitutes an effective teacher. Mitzel (1960) advised that after a half a century of research no standards existed which were commonly agreed upon as the criteria of teacher effectiveness.

Ryans (1960) argued that scientific research on teacher effectiveness should center on the characteristics and educational philosophies of instructors in actual classrooms. Newcomb (1950) indicated that judgments of the effective teacher, and also the ineffective teacher, are in part influenced by the judge's attitudes and philosophies toward education.

Researches of Kerlinger (1963) seem to indicate that there are two principal factors behind attitudes toward education. These two factors, he named "Progressivism and Traditionalism (Kerlinger, 1963, p. 7)." The instructor who is progressive would prize such characteristics as personal warmth, imagination, and sensitivity. The instructor who is traditional would prize such characteristics as conscientiousness, firmness, and thoroughness.

There is a need to have questions asked and answered before there will be any security in our knowledge of the effectiveness of the instructor. In an era of expanding enrollments, increased numbers of faculty, and specialization of knowledge in the community college system, every effort should be made to meet the needs of the students in the classroom and to provide them with adequate instruction. The effectiveness problem cannot be solved by ignoring the judge who judges the effectiveness of instructors.

Significance resides in this study in that it is the initial evaluation of instructors and educational philosophy of students and instructors during the infancy of Blue Ridge Technical Institute. Hopefully, this study will be only one in a series of evaluation of the pervading educational philosophy and student perception of instructor functioning. It seems in order that an investigation of students' and instructors' philosophy of education, and students' perceptions of instructors be conducted at the newly-established Blue Ridge Technical Institute.

Hypotheses

To facilitate the treatment of the data, the hypotheses are stated in the null form.

Major Null Hypothesis

Instructors and students at Blue Ridge Technical Institute do not differ significantly on the D Score of Kerlinger's ES-VII and the Attitude, Instruction and Decorum Scores of the Professional Education Attitude Test when grouped according to the variables of curriculum area, sex, and educational status, i.e., instructor or student.

Null Subhypotheses

The major null hypothesis is outlined in the following null subhypotheses:

1. There is no significant difference between pre- and posttest measures of Kerlinger's ES-VII D score of Blue Ridge Technical Institute students when treated with respect to variables of curriculum and sex.
2. There is no significant difference between pre- and posttest measures of Kerlinger's ES-VII D score of Blue Ridge Technical Institute instructors when grouped together.
3. There is no significant difference between pretest measures of Kerlinger's ES-VII D score of all instructors and students when students are subdivided according to variables of curriculum area, sex, and educational status.
4. There is no significant difference between posttest measures of Kerlinger's ES-VII D score of all instructors and students when students are subdivided according to variables of curriculum area, sex, and educational status.

5. There is no significant difference between pre- and posttest Attitude, Instruction, and Decorum Scores of the Professional Education Attitude Test of Blue Ridge Technical Institute students when treated with respect to variables of curriculum and sex.

Definitions

For the purpose of this study the following terms are defined: (a) Philosophy of Education; (b) Difference (D) Score; and (c) Professional Attitudes.

Philosophy of Education

For the purpose of this study, an attempt was made to discern whether the instructors and students tend to hold a traditional or progressive educational philosophy as measured by the D score of the Kerlinger's ES-VII scale. Philosophy of education refers to those views of education which reflect a traditional or progressive attitude.

Difference (D) Score

The D score is a directional measure derived from the difference between Progressivism (A Factor) and Traditionalism (B Factor) on Kerlinger's ES-VII scale (CF. p. 21).

Professional Attitudes

For the purpose of this study, professional attitudes refer to the general attitudes exhibited by instructors in class; the instructor's ability to impart information and handle curriculum content; and his general manner and decorum in the classroom. These attitudes were measured by the Professional Education Attitude Test (PEAT).

Assumptions and Limitations of the Study

For the purpose of this study the following assumptions and limitations are given:

Assumptions

1. That the questionnaire and instrument used in this investigation were adequate to determine the educational philosophy of instructors and students, and the perceptions of the students toward their instructors.
2. That the students and instructors answered the questions candidly.

Limitations

1. The study was limited to 75 students of a Fall quarter enrollment of 100 curriculum students at Blue Ridge Technical Institute. Twenty-five students were excluded from the study due to withdrawals or absences during the quarter.
2. The study was limited by the restrictive time, one quarter of the school year.
3. The data gathering procedures of questionnaires and rating scales are limited in their sensitivity and ability to ascertain the facts.
4. The conclusions of the investigation are based on the data collected in the study and are limited to populations similar to the population from which this study was drawn.

Chapter 2

Review of Literature

In the area of educational evaluation much has been written regarding teaching assessments made by administrative evaluations, instructor's colleagues, student's achievement tests, and formal student evaluations; but only a brief summary of the work done in this area will here be given. The literature was reviewed under the following headings:

1. Early Assessments of Teacher Evaluation
2. Related Student Evaluations
3. Educational Philosophies of Instructors and Students in the Two-Year College

Early Assessments of Teacher Evaluation

Prior to 1900, much of the appraisal of teaching efficiency was in the realm of opinion. Merriam (1906) placed the concept of evaluation in the field of research and objective measurement by finding a correlation between school achievement and teaching ability following the graduation of the teacher.

During the 1920's, interest in teaching appraisal increased markedly. In this period, users of rating devices noticed that ratings of human traits were inaccurate because the rater's judgment of the trait in a certain individual was influenced by his general impression of that individual.

Thorndike acknowledged this phenomenon in this country and used the term "halo effect" in identifying it.

A study (Charters & Waples, 1929) was made to provide a comprehensive description of the duties and traits of teachers. This study, sponsored by a grant from the Commonwealth Fund, was to provide a basis for determining what teachers should be taught in their college education process. The ultimate end of this study resulted in the identification of some twenty-five traits.

Related Student Evaluations

During the 1930's there was considerable interest in pupil ratings of teachers. Direct pupil rating was not thought to be ethical, so indirect means of obtaining pupil judgments were sought. Perhaps the best representation of research attempts of this nature was done by Bryan (1937). Bryan (1937) conducted a study in which secondary students confidentially rated their teachers and a high correlation was obtained between the pupil ratings and administrator's ratings.

Another study (Broadman, 1930) was made of pupils rating of teachers that indicated correlations of .81 and .88 by pupils in a secondary school and supervisory personnel, respectively.

In a study in 1944 at Purdue University (Davenport, 1944) an attempt was made to investigate pupil ratings of teaching

practices. The results revealed that pupils were quite capable of evaluating teachers and that their ratings were both reliable and valid.

Beginning in 1949 the "Purdue Rating Scale" (Bryan, 1937) for instructors became involved in many studies. The "Purdue Rating Scale" was more widely used and better known than any other instrument devised to obtain pupil ratings of teachers. The instructions at the top of the scale direct the student to rate the instructor on the indicated qualities by making a check on the line at the point which most nearly describes him with reference to the quality one is considering. "The student's check marks were then translated into grades, which determined the pupil rating of the instructor (Bryan, 1937, p. 7)."

Baker and Remmers (1951) described the "Purdue Rating Scale" for instructors "as being a very useful measuring device (p. 145)." They claimed that it tended to eliminate the "halo effect" and served as a diagnostic instrument for instructors.

Another study, concerning the "Purdue Rating Scale," was done by Bendig (1953). Because he felt that most of the research on ratings by students depended upon the grades they received, or expected to receive in a course, he concluded that student achievement does affect their rating, therefore, urged that the "Purdue Rating Scale" be used with caution.

Several studies have stressed that actual responses made by students frequently were artificial for the reason that the students would write or speak to impress teachers. Dressel and Mayhew (1954) reported that Michigan State University had discovered a way of reducing this artificiality by encouraging students to rate each other's work, not in addition to ratings made by teachers but in lieu of them.

There is no doubt that student rating techniques can be mishandled and have tragic results. Morton (1961), concerned with this possibility, discussed the abusive use of appraisals:

No one needs to elaborate on the limitations and possible abuses of the forms. The form itself may be incompletely or improperly phrased, handed out at the wrong time or in the wrong way. It may be subjected to misinterpretation; students may not take it seriously. Some students may be very susceptible to bias, prejudice, and the love of causing trouble for someone. In other cases, the students may lack judgment and blame the instructor for defects residing in the textbook, the hour of the class, the conditions in the classroom, and so on. These limitations sometimes do exist although student evaluations can be quite revealing and helpful in many ways (p. 122).

Samuel Middlebrook (Long, 1967) started a program that dealt with grading practices, student reactions, and teaching effectiveness. In this program a forum was provided for instructors to discuss openly the problems they encountered in the classroom. Class visitation was an integrated part of the program, as was the use of models of effective teaching. Instructors were also encouraged to use a

questionnaire approach in securing instructor evaluations from their own students.

According to Ryans (1954), the resentment toward behavioral assessments held by most teachers, especially those having several years of experience, is quite natural unless they feel that the results will be flattering. However, in any effective program involving personnel, there must be some system of evaluating performance. Ryans (1954) wrote that teachers, in particular, are opposed to having their behavior judged or assessed because they possess a general distrust of the rating personnel and are aware of the ratings being highly unreliable or subjective. These were somewhat valid fears and would require that the administrator of the assessing instrument be extremely cautious and eliminate all conditions that may contribute to their existence.

While the validity of student ratings has been under question for some time, student ratings of teaching are probably utilized much more than the literature indicates. Mueller (1951) found that the trend of formal faculty evaluations by students has grown and is used quite extensively throughout this country.

Woodburne (1966) felt that there were some important aspects of teaching that only a student can evaluate. In his discussion on "Guidelines for Student Ratings," he

stated that:

Somehow we should combine this valid information with an adequate sampling procedure of the entire output of a teacher's performance and carefully and statistically handle it so that the general report on any faculty member is reliable and valid.

Saying that some important effects of teaching cannot be discovered except by asking the students, introduces the problem of the kinds of questions used on the questionnaire. And this is a most crucial matter for valid student evaluation of teaching. The questions must be clearly within the student's area of competence.

If students are asked whether the instructor's presentation is clear and logical, they can give valid answers. But if they are asked whether the instructor is competent to give the course, they have no valid basis for an opinion . . . the questions used, therefore, should elicit judgments about the lecturer's presentation, the logical sequence of materials, the emphasis of the different subtopics, the fairness of the test questions, and the fairness of the grading system (Woodburne, p. 271).

The reviewed studies have pointed out that student evaluations of instruction can be reliable and valid. If properly used, student assessments can be just one of the means of improving instruction. According to McKeachie (1957), "student evaluation used with other 'feedback' devices are very useful and may be of much value to teachers (p. 8)."

Educational Philosophies of Instructors and Students in the Two-Year College

Studies have been conducted to determine educational philosophies of students and instructors at the two-year college level.

Philosophies of Instructors

Reynolds (1962) alluded to a 1937 AAJC meeting for which a description of educators' philosophy of education was stated:

The philosophy of the two-year college at the present time, so far as it has one, is the philosophy of institutionalism. Its aims, as commonly stated, the preparatory function, terminal function, and vocational function, are all conceived from the standpoint of institutions (p. 1).

Early in the history of the junior college, "recognition and acceptance by some instructors of the view that junior college education would be terminal for some students was evident (Richards, 1957, p. 105)."

Lindsay (1957), chief of the Bureau of Secondary Education in California, pointed out in his research that two-year colleges do a competent job of salvaging and rehabilitating many late-maturing students for academic achievement.

From another study of instructors' philosophies of education, Bard (1962) stated that the two-year instructor sought to make the classroom and the laboratory the most effective medium for fulfillment of goals.

Lindeman (1970) observed William James' philosophy of education which contained principles based on a society dominated by an entrenched aristocracy. He believed "that the halls of higher learning equip those passing through them in search of mental nourishment with powers to recognize quality in the ideas and actions of other men (Lindeman,

1970, p. 365)." Business, technical, and professional institutions play no part in his scheme. Technical school graduates are endowed with special skills that enable them to perform in their chosen fields with efficiency.

Olsen (1960) asserted that staff members are aware of the fact that freshmen typically give a variety of reasons for making vocational choices, which reflect instructor philosophy:

One student might express extrinsic types of job satisfaction in his reasons for choosing two-year college education. Another student, may include such satisfactions as his enjoyment of and interest in the work activity involved in the occupation. Some students are looking for opportunities for self-expression and for being of service to other people (p. 396).

Since the beginning of the technical institutes, instructors have been obligated to train students for jobs. "We try to give them the things they will need to earn a living. You have to take this realistic approach (The Open Door, 1970, p. 9)."

Philosophies of Students

In a national study program conducted by members of Zeta Omicron Chapter, Moore (1962) reports students' educational philosophies toward the two-year institutions often include: academic advantages, financial advantages, and social advantages.

Bard (1962) held that high school graduates enter the junior college at different levels of readiness. Different

as they are in many respects, students are alike in some basic fundamentals:

First, they all seek success and fulfillment with each step up the educational ladder. Second, all of them have some anxieties about their own abilities; they need correction when they fail, encouragement when they falter, and praise when they succeed (Bard, 1962, p. 437).

Nardelli (1961) expressed that the ability to think abstractly comes from study, experience, knowledge, and application, and is not necessarily the product of a highly intelligent mind alone.

Atkins (1970) felt that school experience has failed to provide what students need most - "meaningful human encounter (p. 20)." Students ask for involvement in the decisions which affect both the kind of learning they need and the kind of persons they aspire to become. "It is not unreasonable to predict that as the students perceive the school to be responsive, they will perceive it to be enabling (Atkins, 1970, p. 20)."

Summary

A review of literature concerning student evaluations of instructors, and students and instructors educational philosophies has been examined. Beginning in the early twenties and continuing to the present, numerous studies have been made to ascertain student perceptions of their instructors. Through the Purdue Rating Scale, studies

concluded that this instrument was best known in the late forties for obtaining pupil ratings of instructors. The reviewed studies indicated that student evaluation of instruction can be valid and reliable as long as an adequate sampling procedure of the entire output of a teacher's performance be maintained.

Salvaging late-maturing students for academic achievement, training students for jobs, and making the classroom the most effective medium for fulfillment of goals were perceived as reflections of instructors' philosophies of education in the technical institute. A current viewpoint asserted that a realistic approach would include giving the students the things they need to earn a living.

Studies of students educational philosophies were reported which included academic advantages, social advantages, and financial advantages. It was considered necessary for our institutions to include students' educational philosophies in order to provide meaningful human encounter, a school experience students need most.

Chapter 3

Procedures

In this chapter the subjects of the study are defined, the procedures are presented, the instruments used in the study are described, and the statistical techniques employed to treat the data are explained.

Subjects of the Study

The subjects for this study were full-time curriculum instructors at Blue Ridge Technical Institute, and curriculum students who matriculated in the Fall, 1970, at this newly-established institution. Due to absences and withdrawals, 75 students of a fall quarter enrollment of 100 students were pre- and posttested. The subjects were selected on the basis of their enrollment in one of the six initial curriculums offered at the institute.

Table 1 presents the frequencies of the subjects by instructors and students in the study.

Instruments Used in the Study

Two instruments were used in this study: (a) Kerlinger's ES-VII, and (b) the Professional Education Attitude Test (PEAT).
Kerlinger's ES-VII

Kerlinger's ES-VII was designed to measure two distinct attitudes which consistently have emerged from study of many individuals and groups. Kerlinger (1956) identified

Table 1

Frequencies of Students and Instructors
in Curriculum Groups of
Blue Ridge Technical Institute

Curriculum Groups	Students	Instructors
Automotive Mechanics	7	1
Business Administration	24	1
Drafting	8	1
Electrical Installation	16	1
Executive Secretarial	14	1
Welding	6	1
Total	75	6

two factors of educational attitudes, Factor A (Progressive) and Factor B (Traditional). The D score is the difference between Factor A and Factor B.

Reliability and Validity. Early research (Kerlinger, 1958) presents development of ES-I and ES-II as instruments designed to identify and measure independent attitudes.

Kerlinger constructed and developed both ES-VI and ES-VII to effect increase in the reliability of prior instruments. In the development of ES-VII (Padgett, 1967) care was taken to retain high factor loadings and high discriminatory power while simultaneously raising the reliability. ES-VII contains only thirty items, 15 A items and 15 B items.

The factors, A and B, extend a possible range of scores from 15 to 105. A score of 60 reflects a neutral attitude, while a score of 90 indicates a favorable attitude. A score of 30 would reflect an unfavorable attitude toward the specific philosophy.

Factor A. Kerlinger (1958; 1959) identifies factor A as a progressive philosophy. He asserts that this philosophy is indicative of attitudes that are characterized by high value for the student as a person, and a high degree of freedom. He affirms also that persons tending toward this philosophy would be inclined toward a high degree of imagination, sensitivity, and personal warmth.

Factor B. According to Kerlinger (1958; 1959), factor B reflects a traditional philosophy. He contends that this

philosophy contains views of education which reflect control and direction by the instructor, value for learning and content, and emphasis on the cultural heritage. Persons rating high on this philosophy would probably have a propensity for thoroughness, firmness, and conscientiousness.

D Score (A minus B). The D score suggests the degree of consistency of the philosophy held. A D score of +45 (progressive) or -45 (traditional) indicates a clear-cut tendency for the specific philosophy.

Kerlinger's ES-VII can be found in Appendix A.

Professional Education Attitude Test (PEAT)

The PEAT was designed to be employed as a pre- and posttest measure. The purpose of the PEAT is summarized as follows:

1. To determine the student's perception of the instructor's general attitude in the classroom.
2. To determine the student's feeling toward the instructor's ability to impart information and handle course content.
3. To determine the instructor's general manner and decorum as perceived by the students.

The questions on the PEAT are based upon theoretical and general assumptions (Kerlinger, 1956a; Kerlinger, 1958; Kerlinger and Kaya, 1959; Teagarden, 1967). For each of the 25 items, the subject is asked to choose one of five responses:

All of the time	Most of the time	Part of the time	Little of the time	None of the time
5	4	3	2	1

General Attitude. The general attitude statements attempted to elicit student perceptions of their instructor's general attitude as exhibited in the classroom. The students were asked to respond to the following attitude statements as they appeared on the PEAT:

3. The instructor's lectures hold my interest.
6. Instructor avoids inappropriate sarcasm and other remarks which might be embarrassing.
8. I wish to take additional courses under the instructor.
10. I look forward to attending this class.
12. The instructor is approachable outside of class for individual problems and questions.
13. This course, as taught by this instructor, is meaningful to me as a student.
14. The instructor admits his own mistakes and errors.
17. The instructor encourages creativity and individual thinking.
21. Instructor lectures and acts toward students in a manner appropriate to their college grade level.
25. The instructor is calm, poised, and self-controlled.

Instruction. Statements on the PEAT pertaining to the instruction were designed to gain the students' feelings toward their instructor's ability to impart information and curriculum content. The following questions refer to instruction on the PEAT:

1. Instruction starts on time and ends on time.
2. Advance assignments are clear.
9. The instructor stays on the subject.

11. The instructor grades fairly and impartially.
18. The instructor uses a suitable textbook.
19. The instructor repeats lecture materials that are in the textbook.
20. The instructor has an adequate knowledge of his subject.
22. The instructor uses an appropriate balance of instructional techniques.
23. The lessons in this class are well prepared.
24. The class meets for the full period.

Decorum. Decorum statements on the PEAT reflect students' perceptions of the instructors' general manner. Statements of decorum on the PEAT included:

4. Instructor's diction is clear and audible.
5. Instructor dresses and grooms himself appropriately.
7. Instructor has a sense of humor.
15. Instructor has a genial personality.
16. The instructor possesses mannerisms that add to his presentation.

The PEAT can be found in Appendix B.

Evaluation Procedures

During the first week of the fall quarter, 1970, the Professional Education Attitude Test (PEAT) and Kerlinger's ES-VII were administered to the students, while the instructors completed only Kerlinger's ES-VII. The students and instructors were asked to be candid and honest regarding their answers to the instruments. Students were assured

that the instructor would never see the questionnaire. To insure a confidential atmosphere, the Director of Student Personnel distributed the instruments to the students and instructors. The students and instructors were given sufficient time to respond to the instruments.

A confidential atmosphere was further maintained by the use of code numbers on a cover sheet of the instruments. Each student and instructor, from each class, was given a code number so that the Director of Student Personnel was the only person who actually knew the key.

During the week of the final exams of the same quarter, all students were posttested on the Professional Education Attitude Test and Kerlinger's ES-VII, and instructors were administered Kerlinger's ES-VII. The posttest instruments were administered in the same confidential manner. The data were collected and the Director of Student Personnel and the evening secretary compiled the results.

Statistical Procedures

For the purpose of analysis and summary, two-tailed non-directional t ratios were computed between means of scores on Kerlinger's ES-VII and the PEAT. To compare the means, the following formula was employed (Walker & Lev, 1953):

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \frac{N_1 + N_2}{N_1 N_2}}}$$

To obtain an estimate of variance between the two means, the following formula was utilized (Walker & Lev, 1953):

$$S_2 = \frac{(N_1 - 1) S_1^2 + (N_2 - 1) S_2^2}{N_1 + N_2 - 2}$$

Computed ratios of .05 and .01 were established as levels of significance and were employed in the rejection or retention of the null hypotheses (Walker & Lev, 1953).

Summary of Procedures

The initial full-time instructors at Blue Ridge Technical Institute and students who enrolled during fall quarter of 1970, composed the subjects for the study. The students were pre- and posttested on Kerlinger's ES-VII and the Professional Education Attitude Test. Instructors were pre- and posttested on Kerlinger's ES-VII. Data collected from the study were employed to compute two-tailed, non-directional t ratios.

Chapter 4

Analysis of the Data

The purpose of the study was to determine if any significant changes occurred in students' perceptions of instructors' professional attitudes, and instructors' and students' educational philosophy during the initial quarter at newly-established Blue Ridge Technical Institute.

The data used in the analysis involve the initial students who matriculated during fall quarter of 1970 at Blue Ridge Technical Institute, and the initial six full-time instructors.

Kerlinger's ES-VII was used to determine any instructor and student change of educational philosophy over an academic quarter. The Professional Education Attitude Test (PEAT) was employed to determine changes of instructors' professional attitudes as perceived by the students.

For the purpose of treating the data statistically, the null hypothesis was employed:

Instructors and students at Blue Ridge Technical Institute do not differ significantly on the D score of Kerlinger's ES-VII and the Attitude, Instruction, and Decorum scores of the Professional Education Attitude Test when grouped according to the variables of curriculum area and sex.

Tabular Organization

Results of the statistical data are presented in Tables 2 - 18. The tables for t ratios pertaining to Kerlinger's ES-VII define subgroups, degrees of freedom, and t ratios. Any significant difference at the .05 and .01 levels is recorded.

The tabular information on the Professional Education Attitude Test includes subgroups, degrees of freedom, and t ratios. Significant levels at .05 and .01 are noted.

Tabular results are discussed under the restatement of each null subhypothesis.

Hypotheses Relating to Kerlinger's ES-VII D Score

Null Subhypothesis 1

There is no significant difference between pre- and posttest measures of Kerlinger's ES-VII D score of Blue Ridge Technical Institute students when treated with respect to variables of curriculum and sex.

Kerlinger's ES-VII D score was employed to ascertain a measure of the students' educational philosophy. The D score measures the direction of student's philosophy. Plus scores are in a progressive direction and minus scores are in a traditional direction. Means and Standard Deviations for all students on Kerlinger's ES-VII D score when subgrouped according to sex and curriculum are reported in Tables 2 and 3.

Table 2

Means and Standard Deviations of Sex Subgroups
of Students on Kerlinger's ES-VII

Group	<u>Pretest</u>		<u>Posttest</u>	
	Mean	S. D.	Mean	S. D.
Male	5.25	10.91	4.96	12.47
Female	2.00	8.68	2.30	7.62
Total	4.59	10.41	4.25	11.73

Table 3

Means and Standard Deviations of Curriculum Subgroups
of Students on Kerlinger's ES-VII D Score

Curriculum Groups	<u>Pretest</u>		<u>Posttest</u>	
	Mean	S. D.	Mean	S. D.
Automotive Mechanics	4.29	7.09	-1.71	4.96
Business Administration	12.29	7.61	10.38	13.69
Drafting	5.38	11.78	9.00	11.39
Electrical Installation	-2.13	8.39	-1.75	11.24
Executive Secretarial	.71	8.48	.85	4.49
Welding	-2.50	11.26	4.33	9.91
Total	4.59	10.41	4.25	11.73

Table 4 reports the computed t ratio between pre- and posttest measures of Kerlinger's ES-VII D score for students grouped according to variables of sex. No significant t ratios were determined for male, female, and total subgroups. Null subhypothesis 1 was not rejected for the variable of sex.

Computed t ratios between pre- and posttest measures of Kerlinger's ES-VII D score for students grouped according to variables of curriculum area are reported in Table 5. Significant differences were found between pre- and posttest measures of Kerlinger's ES-VII D score for Business Administration and Drafting students at the .05 level of significance. For these scores, the null subhypothesis was rejected. Business Administration students showed a significant increase in the direction of a traditional philosophy of education between the pre- and posttest measurements. The significant change for drafting students indicated a movement toward acceptance of a progressive philosophy. For the subgroups of Automotive Mechanics, Electrical Installation and Maintenance, Executive Secretarial, Welding, and total groups there were no significant t ratios reported, and the null subhypothesis for these groups was not rejected.

Null Subhypothesis 2

There is no significant difference between pre- and posttest measures of Kerlinger's ES-VII D score of Blue Ridge Technical Institute instructors when grouped together.

Table 4

t Ratios for Pre- and Posttest Measures for
Sex Subgroups of Students on
Kerlinger's ES-VII D Score

Subgroup	df	t Ratio	Level of Significance
Male	108	.43	NS
Female	38	-.33	NS
Total	148	.60	NS

Table 5

t Ratios for Pre- and Posttest Measures for
Curriculum Subgroups of Students on
Kerlinger's ES-VII D Score

Subgroup	df	t Ratio	Level of Significance
Automotive Mechanics	12	1.88	NS
Business Administration	46	2.08	.05
Drafting	14	-2.13	.05
Electrical Installation	30	.34	NS
Executive Secretarial	26	-.15	NS
Welding	10	-.99	NS
Total	148	.60	NS

To determine the instructors' philosophy of education, and any changes that may occur during the first quarter of Blue Ridge Technical Institute existence, pre- and posttest measures of Kerlinger's ES-VII D score were secured.

Pre- and posttest D scores of Kerlinger's ES-VII are recorded in Table 6. Table 6 also contains the mean and standard deviation for six full-time instructors as a group on pre- and posttest measures.

Table 7 reports the computed t ratios between pre- and posttest measures of Kerlinger's ES-VII D score for all instructors. No significant t ratio was observed for instructors, so the null subhypothesis was not rejected.

Null Subhypothesis 3

There is no significant difference between pretest measures of Kerlinger's ES-VII D score of all instructors and students when students are subdivided according to variables of curriculum area and sex.

Results of t ratios between instructors and students on the Kerlinger's ES-VII pretest with respect to the variable of curriculum area are reported in Table 8. Significant t ratios are observed at the .01 level of significance for curriculum areas of Electrical Installation and Business Administration, while significant t ratios for the Welding - instructor subgroup of the Kerlinger's ES-VII D score are reported at the .05 level of significance. For these scores, the null subhypothesis was rejected. Welding

Table 6

Comparison of the Mean Scores of Instructors
on Kerlinger's ES-VII D Score

Instructor	f	Pretest	Posttest
A (Drafting)	1	2	-6
B (Business Administration)	1	-7	2
C (Executive Secretarial)	1	23	22
D (Automotive Mechanics)	1	-7	-1
E (Welding)	1	-2	1
F (Electrical Installation)	1	4	-8
Total Group Mean	6	2.17	1.67
Total Group Standard Deviation	6	11.16	10.70

Table 7

t Ratios Between Pre- and Posttest Measures
of Kerlinger's ES-VII D Score
for Total Instructors Group

Group	df	t Ratio	Level of Significance
Instructors	10	.26	NS

Table 8

t Ratios Between Pretest Measures of
Kerlinger's ES-VII D Score for
Instructors and Curriculum Subgroups

Subgroups	df	t Ratio	Level of Significance
Instructors - Automotive Mechanics	11	-1.25	NS
Instructors - Electrical Installation	20	2.97	.01
Instructors - Business Administration	28	-7.67	.01
Instructors - Executive Secretarial	18	.98	NS
Instructors - Drafting	12	-1.65	NS
Instructors - Welding	10	2.36	.05

and Electrical students recorded a significant inclination toward a traditional philosophy of education between the instructor - curriculum area measurements. Business Administration students show an inclination in the direction of a progressive philosophy of education. For the subgroups of Automotive Mechanics, Secretarial, and Drafting there were no significant t ratios reported, so the null subhypothesis for these groups was not rejected.

Table 9 reveals significant t ratios at the .05 level for the instructor - male subgroup on the measure of Kerlinger's ES-VII D score for instructors and sex subgroups. Male students were more significantly inclined toward a progressive philosophy than instructors. The null subhypothesis was rejected for the groups of instructors and male students, but was not rejected by the other groups in the analysis.

Null Subhypothesis 4

There is no significant difference between posttest measures of Kerlinger's ES-VII D score of all instructors and students when students are subdivided according to variables of curriculum area and sex.

Table 10 reveals the computed t ratios between instructor and curriculum area measures of Kerlinger's ES-VII D score for students grouped according to the variable of curriculum area. When the D scores of Kerlinger's ES-VII between instructors and students were tested by t ratios, significance was found for Automotive Mechanics and Electrical Installation

Table 9

t Ratios Between Pretest Measures of
Kerlinger's ES-VII D Score for
Instructors and Sex Subgroups

Subgroups	df	t Ratio	Level of Significance
Instructors - Male	59	-2.20	.05
Instructors - Female	24	.12	NS
Instructors - Total	79	-1.77	NS

Table 10

t Ratios Between Posttest Measures of
Kerlinger's ES-VII D Score for
Instructors and Curriculum Subgroups

Subgroups	df	t Ratio	Level of Significance
Instructors - Automotive Mechanics	11	2.21	.05
Instructors - Electrical Installation	20	2.14	.05
Instructors - Business Administration	28	-5.22	.01
Instructors - Executive Secretarial	18	.67	NS
Instructors - Drafting	12	-4.72	.01
Instructors - Welding	10	-1.40	NS

at the .05 level of significance. Business Administration and Drafting students reported significance at the .01 level, when compared with instructors.

Automotive Mechanics and Electrical Installation - instructors, in comparison with Automotive Mechanics and Electrical Installation students, were significantly more progressive in their educational philosophy.

On posttest measures, Business Administration students scored significantly more toward the progressive philosophy of education. These students indicated attitudes toward the importance of freedom, democracy, and sensitivity by the instructor. The instructor - Drafting subgroup also holds this view as indicated in the analysis by a significant t ratio.

For the subgroups of Automotive Mechanics, Electrical Installation, Business Administration, and Drafting, the subhypothesis was rejected. The remaining subgroups, instructor - Welding and instructor - Secretarial showed no significant scores, so the null subhypothesis was not rejected for these groups.

An examination of Table 11, t ratios between posttest measures of Kerlinger's ES-VII D score for instructor and sex subgroups, showed significant t ratios between the instructor and male variable at the .05 level of significance. Male students were more significantly inclined toward a progressive philosophy than were instructors.

Table 11

t Ratios Between Posttest Measures of
Kerlinger's ES-VII D Score for
Instructors and Sex Subgroups

Subgroups	df	t Ratio	Level of Significance
Instructors - Male	59	-2.19	.05
Instructors - Female	24	-.47	NS
Instructors - Total	79	-1.43	NS

The null subhypothesis was rejected by the variable of instructor - male students. Female and total group did not report significant t ratios, and the null subhypothesis was not rejected by these subgroups.

Hypothesis Relating to
Professional Education Attitude Test

Null Subhypothesis 5

There is no significant difference between pre- and posttest Attitude, Instruction, and Decorum scores of the Professional Education Attitude Test of Blue Ridge Technical Institute students when treated with respect to variables of curriculum and sex.

The Professional Education Attitude Test (PEAT) was utilized to determine a measure of the students' perceptions of instructors' professional attitudes. The three scores of the PEAT used in this study included general attitude, instruction, and decorum. Ten statements pertaining to students' perceptions of instructors' general attitude in classroom were included in the PEAT; 10 statements were included to gain the student's feeling toward their instructor's ability to impart information; and five statements were used in the PEAT to reflect students' perceptions of the instructors' general manner in the classroom.

Pre- and posttest means and standard deviations for all students on the Attitude, Instruction, and Decorum

scores of the PEAT when subgrouped according to sex and curriculum areas are reported in Tables 12 - 14.

In Table 15, no significant t ratios are reported between sex subgroups of Blue Ridge Technical Institute students on pre- and posttest measures of attitude, instruction, and decorum scores of the PEAT. Null subhypothesis 5 was not rejected for the variable of sex.

Table 16 shows no significant t ratios between curriculum subgroups on the pre- and posttest measures of Attitude score of the PEAT, so the null subhypothesis for this variable was not rejected.

Computed t ratios between curriculum subgroups on the pre- and posttest instruction scores of the PEAT are reported in Table 17. Significant differences were found between pre- and posttest measures of the instruction score of the PEAT for Welding students at the .05 level of significance. For this score, the null subhypothesis was rejected. Welding students showed a significant change in their perceptions of the instructor's instruction techniques. Their perceptions indicated a decline in instructor ability to impart information. Remaining curriculum areas showed no significant change in pre- and posttest perceptions of instructors' instruction, so the null subhypothesis for these areas was not rejected.

Table 18 shows no significant t ratios between curriculum subgroups on the pre- and posttest measure of decorum

Table 12

Means and Standard Deviations of Sex
Subgroups of Students on
Professional Education Attitude Test (PEAT)

Variable	Pretest		Posttest	
	Mean	S. D.	Mean	S. D.
Attitude:				
Male	46.22	4.14	46.02	4.13
Female	44.25	7.34	44.80	6.60
Total	45.69	5.31	45.69	4.89
Instruction:				
Male	46.11	7.52	45.24	4.05
Female	43.95	16.08	45.65	4.95
Total	45.53	5.11	45.35	4.28
Decorum:				
Male	23.25	2.07	23.07	2.02
Female	22.50	3.33	23.15	2.35
Total	23.05	2.47	23.09	2.09

Table 13

Pretest Means and Standard Deviations of Curriculum Subgroups
of Students on the Professional Education Attitude Test (PEAT)

Curricula	Attitude		Instruction		Decorum	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Automotive Mechanics	44.71	8.28	45.14	3.85	22.71	2.66
Business Administration	43.29	6.68	42.83	5.15	22.25	3.18
Drafting	47.50	3.34	46.75	3.50	23.75	1.98
Electrical Installation	47.44	1.93	47.19	3.21	23.69	1.25
Executive Secretarial	46.71	4.34	47.71	2.95	23.29	2.46
Welding	47.00	2.45	46.67	2.95	23.33	1.37
Total	45.69	5.31	45.53	5.11	23.05	2.47

Table 14

Posttest Means and Standard Deviations of Curriculum Subgroups
of Students on the Professional Education Attitude Test (PEAT)

Curricula	Attitude		Instruction		Decorum	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
Automotive Mechanics	45.14	3.89	44.14	3.24	22.29	2.21
Business Administration	42.29	5.42	43.13	4.40	22.21	2.36
Drafting	48.88	1.88	47.88	2.17	24.38	1.06
Electrical Installation	48.44	1.96	46.81	3.74	23.94	1.65
Executive Secretarial	46.50	4.40	47.21	3.71	23.50	2.03
Welding	46.50	3.94	44.00	5.48	22.67	1.64
Total	45.69	4.89	45.35	4.28	23.09	2.09

Table 15

t Ratios Between Sex Subgroups of
Blue Ridge Technical Institute Students on
Pre- and Posttest Measures of Attitude,
Instruction, and Decorum Scores of the
Professional Education Attitude Test (PEAT)

Group	df	t Ratio	Level of Significance
Attitude:			
Male	108	.49	NS
Female	38	-.66	NS
Total	148	.00	NS
Instruction:			
Male	108	1.81	NS
Female	38	-1.67	NS
Total	148	.49	NS
Decorum:			
Male	108	.64	NS
Female	38	-1.23	NS
Total	148	.15	NS

Table 16

t Ratios Between Curriculum Subgroups of Blue Ridge
 Technical Institute Students Pre- and Posttest
 Measures of the Attitude Score of the
 Professional Education Attitude Test (PEAT)

Curriculum Area	df	t Ratio	Level of Significance
Automotive Mechanics	12	-.33	NS
Business Administration	46	1.45	NS
Drafting	14	-1.70	NS
Electrical Installation	30	-2.00	NS
Executive Secretarial	26	.27	NS
Welding	10	.49	NS

Table 17

t Ratios Between Curriculum Subgroups of Blue Ridge
 Technical Institute Students Pre- and Posttest
 Measures of the Instruction Score of the
 Professional Education Attitude Test (PEAT)

Curriculum Area	df	t Ratio	Level of Significance
Automotive Mechanics	12	.98	NS
Business Administration	46	-.48	NS
Drafting	14	-1.35	NS
Electrical Installation	30	.57	NS
Executive Secretarial	26	.73	NS
Welding	10	2.26	.05

Table 18

t Ratios Between Curriculum Subgroups of Blue Ridge
 Technical Institute Students Pre- and Posttest
 Measures of the Decorum Score of the
 Professional Education Attitude Test (PEAT)

Curriculum Area	df	t Ratio	Level of Significance
Automotive Mechanics	12	.50	NS
Business Administration	46	.09	NS
Drafting	14	-1.02	NS
Electrical Installation	30	-.57	NS
Executive Secretarial	26	-.37	NS
Welding	10	.93	NS

score of the PEAT. For these groups, the null subhypothesis was not rejected. The subgroups did not differ significantly in their changes with respect to instructor's general classroom manner and decorum.

Summary

In this chapter the statistical treatment of the data has been described. The tabular results were discussed under the restatement of each null subhypothesis.

In Null Subhypothesis 1 regarding pre- and posttest measures of Kerlinger's ES-VII D score according to the variable of curriculum area, it was noted that Business Administration and Drafting students showed a significant change at the .05 level in the direction of a traditional philosophy of education. For these scores the Null Subhypothesis was rejected. For the other subgroups there were no significant t ratios reported, so the Null Subhypothesis for these groups was not rejected.

In Null Subhypothesis 2, pre- and posttest measures of Kerlinger's ES-VII D score for all instructors were reported. No significant t ratios were observed for instructors; therefore, Null Subhypothesis 2 was not rejected.

Null Subhypothesis 3 was rejected for curriculum areas of Electrical Installation students, Business Administration students, and Welding students when compared with all instructors on pretest measures of Kerlinger's ES-VII D

score. For these subgroups on the variable of curriculum area, the Null Subhypothesis was rejected. For Automotive Mechanics, Secretarial, and Drafting subgroups, no significant t ratios were reported, so the Null Subhypothesis for these groups was not rejected.

In reference to Null Subhypothesis 4, computed t ratios between instructor and curriculum area measures of Kerlinger's ES-VII D score for students disclosed significance for Automotive Mechanics, Electrical Installation, Business, and Drafting students. For these subgroups, the Null Subhypothesis was rejected. The remaining subgroups showed no significant scores, so the Null Subhypothesis was not rejected for these groups.

When the sex variable of Null Subhypothesis 4 was examined, significant t ratios between the instructors and male subgroups were found. The Null Subhypothesis was rejected for the subgroups of instructor and male students. Female and Total Group did not report significant t ratios, and the Null Subhypothesis was not rejected by these groups.

No significant t ratios were reported between sex subgroups of students on pre- and posttest measures of the Attitude, Instruction, and Decorum scores of the PEAT. Null Subhypothesis 5 was not rejected for the variable of sex. Computed t ratios between pre- and posttest measures of single scores, Attitude, Instruction, and Decorum of the

PEAT, indicated only one significant difference with reference to the variable of curriculum area. Significant differences were found between the pre- and posttest measures of the Instruction score of the PEAT for Welding students. For this score, the Null Subhypothesis was rejected. Remaining curriculum areas showed no significant change in pre- and posttest perceptions of instructors' Instruction, Attitude, and Decorum. The Null Subhypothesis for these scores was not rejected.

Chapter 5

Summary, Conclusions, and Recommendations

Chapter 5 presents a summary of the study, conclusions drawn from the analysis of the data, and recommendations based on the results of the statistical analysis of the data and overall findings of the study.

Summary

The purpose of the study was to investigate student perceptions of instructors' professional attitudes, and students' and instructors' educational philosophy during the initial quarter in a newly established technical institute.

The objectives were as follows: (a) to determine whether students' perceptions of their instructors at the end of a quarter differed significantly from their initial perceptions; (b) to determine if students' philosophy of education yielded any significant changes over a quarter; (c) and to determine if instructors' philosophy of education changed significantly.

Literature related to the study was reviewed and reported under three headings:

1. Literature related to early assessments of teacher evaluation.
2. Literature related to student evaluations.
3. Literature related to the educational philosophies of instructors and students in the two-year institution.

The 75 subjects of the study were selected from the initial 100 fall quarter enrollees at Blue Ridge Technical Institute. Twenty-five students from the initial 100 enrollees were excluded from the study due to withdrawals or absences during the quarter. The instructors of the study were the initial full-time curriculum instructors employed at the Institute.

The students in the study were pre- and posttested on two instruments: (a) Kerlinger's ES-VII, and (b) the Professional Education Attitude Test. The instructors of the study were pre- and posttested on Kerlinger's ES-VII.

Data collected on the two instruments were subjected to statistical treatment to test five null subhypotheses at the .05 and .01 levels of significance. The subhypotheses were stated in the null form to facilitate the handling of the data. Computed *t* ratios were employed to test the null subhypotheses.

Conclusions

Upon the basis of the statistical analyses of this study, the Major Null Hypothesis was rejected. More specifically, the Null Subhypotheses 1, 3, 4, and 5 were rejected, but Null Subhypothesis 2 was not rejected. The conclusions that follow are made with respect to the null subhypotheses which were rejected.

1. Null Subhypothesis 1 was rejected for the variable of curriculum area of students for the D score on Kerlinger's ES-VII. Results of significant t ratios for this variable are as follows:
 - a. Business Administration students showed a significant increase in the direction of a traditional philosophy of education between the pre- and posttest measurements.
 - b. Drafting students indicated a significant movement toward acceptance of a progressive educational philosophy.
2. Null Subhypothesis 3 was rejected for the variables of curriculum area and sex for the pretest measures of Kerlinger's ES-VII D score of all instructors and students. Results of significant t ratios for these variables are as follows:
 - a. Welding and Electrical students recorded a significant inclination toward a traditional philosophy of education between the instructor - curriculum area measurements. These students were inclined toward a traditional educational philosophy more than were all the instructors on the pretest measures.
 - b. Business Administration students were more significantly inclined in the direction of a progressive philosophy of education than the six instructors.
 - c. Males were more significantly inclined toward a progressive educational philosophy than all instructors on the pretest measure.
3. Null Subhypothesis 4 was rejected for the variables of curriculum area and sex for the posttest measures of Kerlinger's ES-VII D score of all instructors and students. Significant t ratios for these variables are reported as follows:

- a. Automotive and Electrical students, in comparison with instructors, were significantly more traditional in their educational philosophy.
 - b. On posttest measures, Business Administration and Drafting students scored significantly more in the direction of a progressive educational philosophy on Kerlinger's ES-VII D score than did instructors.
 - c. Male students were significantly inclined toward a progressive educational philosophy more than were instructors.
4. Null Subhypothesis 5 was rejected for the variable of Instruction of the Professional Education Attitude Test between curriculum subgroups. The result of the significant t ratio between curriculum subgroups on the pre- and posttest measures of the Instruction score of the PEAT shows that Welding students indicated a significant change in their perceptions of the instructor's instruction techniques. Student perceptions suggested a decline in instructor ability to impart information. No significant t ratios were found between curriculum subgroups on the pre- and posttest measures of Attitude and Decorum scores of the PEAT over a period of one academic quarter.

During the quarter, Drafting students showed a significant increase in the direction of a progressive philosophy. Their movement indicated greater acceptance of the educational setting where students are allowed to

express attitudes, thoughts, and opinions with a feeling that they contribute to a learning experience. Business students moved toward a traditional philosophy of education over the academic quarter. These students moved toward a higher degree of firmness, thoroughness, and conscientiousness than they held in the pretest period. Significant differences toward a progressive philosophy of Business Administration students when compared with instructors were found on the posttest measure of Kerlinger's ES-VII as they existed on the pretest measure. Electrical students retained the same significant differences on the posttest toward a traditional philosophy of education as on the pretest, when compared with instructors. On the pretest, Welding students showed an inclination toward a traditional philosophy of education. No significant differences were noted on the posttest of Welding students when compared with instructors. This factor indicated a movement of instructors and Welding students toward each other. Drafting students and instructors moved closer together on the pre- and posttest measures of Kerlinger's ES-VII. When compared with instructors on Kerlinger's ES-VII pre- and posttest measures, male students retained their position of holding a progressive educational philosophy on the posttest measure which they held earlier.

Recommendations

Based upon the results of this study the following recommendations are made:

1. That a replication of this study be conducted at a future date with refinement of the Professional Education Attitude Test (PEAT) to be considered.
2. That there be continuous exploration of philosophies of instructors and students to determine if similarities or differences in educational philosophies tend to affect positively the learning atmosphere.
3. That in-service and/or other programs be promoted to encourage the willingness of instructors to be evaluated by students in an on-going evaluation of instructors' attitudes and philosophies.

REFERENCES

References

- Atkins, N. P. What do they want? The Education Digest, 1970, 35, 19-21.
- Bard, H. Teaching at the junior college level: some guideposts for the improvement of instruction. Junior College Journal, 1962, 32, 437-440.
- Baker, P. C., and Remmers, H. H. Progress in research on personnel evaluations. Journal of Teacher Education, 1951, 2, 143-146.
- Bendig, A. W. Relation of level of course achievement to student's instructor and course ratings in introductory psychology. Educational and Psychological Measurement, 1953, 13, 437-447.
- Broadman, C. W. An analysis of pupil ratings of high school teachers. Education Administration and Supervision, 1930, 16, 441-444.
- Bryan, R. C. Pupil rating of secondary school teachers. New York: Bureau of Publications, Columbia University, 1937.
- Centra, J. A. Problems of evaluating teaching. Current Issues in Higher Education, 1966, NV, 261-264.
- Charters, W. W., and Waples, D. The commonwealth teacher-training study. Chicago: University of Chicago Press, 1929.
- Davenport, K. An investigation into pupil rating of certain teaching practices. Studies in Higher Education, 1944, 49, 5-60.
- Dillman, T. When college students grade the faculty. Today's Education, 1970, 59, 62-71.
- Dressel, P. L. and Mayhew, L. B. Evaluation as an aid to instruction. Accent on Teaching, 1954, 16, 297-320.
- Eckert, R. E., and Stecklein, J. E. Career motivations and satisfactions of junior college teachers. Junior College Journal, 1959, 30, 83-89.

- Kerlinger, F. N. The attitude structure of the individual: a Q-study of the educational attitudes of professors and laymen. Genetic Psychology Monograph, 1956a, 53, 317-328.
- Kerlinger, F. N. The origin of the doctrine of permissiveness in american education. Progressive Education, 1956b, 33, 161-165.
- Kerlinger, F. N. Progressive and traditional basic educational attitudes. School Review, 1958, 55, 80-92.
- Kerlinger, F. N., & Kaya, E. Predictive validity of scale constructed to measure attitudes toward education. Education and Psychological Measurement, 1959, 19, 305-317.
- Kerlinger, F. N. Educational attitudes and perceptions of teachers: suggestions for teacher-effectiveness research. School Review, 1963, 71, 1-11.
- Lichty, E. A. Some aspects of the status of junior colleges. Junior College Journal, 1954, 24, 374-376.
- Lindeman, J. William James and the octopus of higher education. School and Society, 1970, 98, 365-367.
- Lindsay, F. B. Junior colleges in higher education. Junior College Journal, 1957, 28, 125-131.
- Long, L. Why evaluate? 1967 Current Issues in Higher Education, 1967, NV, 118-122.
- McKeachie, W. J. Student rating of faculty: a research review. Improving College and University Teaching, 1967, 5, 4-8.
- Merriam, J. L. Normal school education and teaching efficiency. New York: Bureau of Publications, Columbia University, 1906.
- Mitzel, H. E. Teacher effectiveness. In C. W. Harris (Ed.), Encyclopedia of educational research. New York: Macmillan Company, 1960.
- Moore, C. The image of the junior college. Junior College Journal, 1962, 33, 195-198.

- Morton, R. K. Evaluating college teaching. Improving College and University Teaching, 1961, 9, 122-123.
- Mueller, F. J. Trends in student ratings of faculty. American Association of University Professors Bulletin, 1951, 37, 319-324.
- Nardelli, W. Learning patterns of junior college students. Junior College Journal, 1961, 32, 123-126.
- Newcomb, T. M. Social psychology. New York: Dryden Press, 1950.
- Olsen, L. R. Junior college students' reasons for occupational choice. Junior College Journal, 1960, 30, 396-399.
- Open Door. Flexibility in the classroom. Raleigh, N. C., 1970.
- Padgett, H. G. Effects of group guidance and group counseling on the self-concept and professional attitudes of prospective teachers. Unpublished doctoral dissertation, University of Georgia, 1967.
- Reynolds, J. W. Images or services of junior colleges. Junior College Journal, 1962, 33, 1-3.
- Richards, M. J. An analysis of the technical education provided by the accredited junior colleges. Junior College Journal, 1957, 28, 105-108.
- Ryans, D. G. Notes on the rating of teacher performance. Journal of Educational Research, 1954, 47, 695-696.
- Ryans, D. G. Characteristics of teachers. Washington, D. C.: American Council on Education, 1960.
- Teagarden, P. K. Study of the effectiveness of student and administrator evaluation of instructors in a small private college. Unpublished Masters thesis, University of Tennessee, 1967.
- Voeks, V. W. Publications and teacher effectiveness. Journal of Higher Educations, 1962, 33, 212-218.
- Walker, Helen M. and Lev, J. Statistical inference. New York: Holt, Rinehardt and Winston, 1953.

Weigel, R. G., Oetting, E. R., & Tasto, D. L. Differences in course grades and student ratings of teacher performance. School and Society, 1971, 99, 60-62.

Woodburne, L. S. Guidelines for student ratings of faculty. 1966 Current Issues in Higher Education, 1966, NV, 269-272.

Appendix A

KERLINGER'S ES - VII

Instructions: Given below are 30 statements on educational ideas and problems about which we all have beliefs, opinions, and attitudes. We all think differently about such matters, and this scale is an attempt to let you express your beliefs and opinions. To indicate your responses, circle the letters which express your beliefs most appropriately according to the following symbols:

VSA - Very Strongly Agree D - Disagree
 SA - Strongly Agree SD - Strongly Disagree
 A - Agree VSD - Very Strongly Disagree

Respond to each statement as best you can. Go rapidly but carefully. Do not spend too much time on any one statement; try to respond and then go on.

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|--|-----|----|---|---|----|-----|
| 1. Learning is essentially a process of increasing one's store of information about the various fields of knowledge. | VSA | SA | A | D | SD | VSD |
| 2. The Curriculum consists of subject matter to be learned and skills to be acquired. | VSA | SA | A | D | SD | VSD |
| 3. The learning of proper attitudes is often more important than the learning of subject matter. | VSA | SA | A | D | SD | VSD |
| 4. It is more important that the child learn how to approach and solve problems than it is for him to master the subject matter of the curriculum. | VSA | SA | A | D | SD | VSD |
| 5. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future. | VSA | SA | A | D | SD | VSD |
| 6. What is needed in the modern classroom is a revival of the authority of the teacher. | VSA | SA | A | D | SD | VSD |

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|-----|---|-----|----|---|---|----|-----|
| 7. | Teachers should keep in mind that pupils have to be made to work. | VSA | SA | A | D | SD | VSD |
| 8. | Schools of today are neglecting the three R's. | VSA | SA | A | D | SD | VSD |
| 9. | Standards of work should not be the same for all pupils; they should vary with the pupil. | VSA | SA | A | D | SD | VSD |
| 10. | The goals of education should be dictated by children's interest and needs as well as by the demands of society. | VSA | SA | A | D | SD | VSD |
| 11. | Each subject and activity should be aimed at developing a particular part of the child's makeup: physical, intellectual, social, moral, or spiritual. | VSA | SA | A | D | SD | VSD |
| 12. | Right from the very first grade, teachers must teach the child at his own level and not at the level of the grade he is in. | VSA | SA | A | D | SD | VSD |
| 13. | Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to teaching children. | VSA | SA | A | D | SD | VSD |
| 14. | Learning experiences organized around life experiences rather than around subjects is desirable in our schools. | VSA | SA | A | D | SD | VSD |
| 15. | We should fit the curriculum to the child and not the child to the curriculum. | VSA | SA | A | D | SD | VSD |
| 16. | Subjects that sharpen the mind, like mathematics and foreign languages, need greater emphasis in the public school. | VSA | SA | A | D | SD | VSD |
| 17. | Since life is essentially a struggle, education should emphasize competition and the fair competitive spirit. | VSA | SA | A | D | SD | VSD |

18. The healthy interaction of pupils one with another is just as important in school as is the learning of subject matter. VSA SA A D SD VSD
19. The organization of instruction and learning must be centered on universal ideals and truths if education is to be more than passing fads and fancies. VSA SA A D SD VSD
20. The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage. VSA SA A D SD VSD
21. True discipline springs from interest, motivation, and involvement in live problems. VSA SA A D SD VSD
22. Emotional development and social development are as important in the evaluation of pupil progress as academic achievement. VSA SA A D SD VSD
23. Education and educational institutions must be sources of new social ideas. VSA SA A D SD VSD
24. Children should be taught that all problems should be subjected to critical and objective scrutiny, including religious, moral, economic, and social problems. VSA SA A D SD VSD
25. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children. VSA SA A D SD VSD
26. Teachers should encourage pupils to study and criticize our own and other economic systems and practices. VSA SA A D SD VSD
27. Children need and should have more supervision and discipline than they usually get. VSA SA A D SD VSD

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|-----|---|-----|----|---|---|----|-----|
| 28. | Schools should teach children dependence on higher moral values. | VSA | SA | A | D | SD | VSD |
| 29. | The public school should take an active part in stimulating social change. | VSA | SA | A | D | SD | VSD |
| 30. | Learning is experimental; the child should be taught to test alternatives before accepting any of them. | VSA | SA | A | D | SD | VSD |

Appendix B

THE PROFESSIONAL EDUCATION ATTITUDE TEST (PEAT)

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|----------------------|------------------------|
| 5 - all of the time | 2 - little of the time |
| 4 - most of the time | 1 - none of the time |
| 3 - part of the time | |

Frankly evaluate this class up-to-date on the following, using the above criteria, by circling:

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| 1. Instruction starts on time and ends on time. | 5 4 3 2 1 |
| 2. Advance assignments are clear. | 5 4 3 2 1 |
| 3. The instructor's lectures hold my interest. | 5 4 3 2 1 |
| 4. Instructor's diction is clear and audible. | 5 4 3 2 1 |
| 5. Instructor dresses and grooms himself appropriately. | 5 4 3 2 1 |
| 6. Instructor avoids inappropriate sarcasm and other remarks which might be embarrassing. | 5 4 3 2 1 |
| 7. Instructor has a sense of humor. | 5 4 3 2 1 |
| 8. I wish to take additional courses under the instructor. | 5 4 3 2 1 |
| 9. The instructor stays on the subject. | 5 4 3 2 1 |
| 10. I look forward to attending this class. | 5 4 3 2 1 |
| 11. The instructor grades fairly and impartially. | 5 4 3 2 1 |
| 12. The instructor is approachable outside of class for individual problems and questions. | 5 4 3 2 1 |
| 13. This course, as taught by this instructor, is meaningful to me as a student. | 5 4 3 2 1 |
| 14. The instructor admits his own mistakes and errors. | 5 4 3 2 1 |
| 15. Instructor has a genial personality. | 5 4 3 2 1 |
| 16. The instructor possesses mannerisms that add to his presentation. | 5 4 3 2 1 |
| 17. The instructor encourages creativity and individual thinking. | 5 4 3 2 1 |

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| 18. | The instructor uses a suitable textbook. | 5 4 3 2 1 |
| 19. | The instructor repeats lecture materials that are in the textbook. | 5 4 3 2 1 |
| 20. | The instructor has an adequate knowledge of his subject. | 5 4 3 2 1 |
| 21. | Instructor lectures and acts toward students in a manner appropriate to their college grade level. | 5 4 3 2 1 |
| 22. | The instructor uses an appropriate balance of instructional techniques. | 5 4 3 2 1 |
| 23. | The lessons in this class are well prepared. | 5 4 3 2 1 |
| 24. | The class meets for the full period. | 5 4 3 2 1 |
| 25. | The instructor is calm, poised and self-controlled. | 5 4 3 2 1 |